

refined oil would not necessarily constitute a significant environmental impact as defined in 40 CFR 1508.27.

- **Air Quality:** Emissions cause an increase in pollutants over an area of at least a few tens of square kilometers that exceeds half the increase permitted under the Prevention of Significant Deterioration criteria or the National Ambient Air Quality Standards for nitrogen dioxide, sulfur dioxide, or particulate matter less than 10 microns in diameter; or exceeds half the increase permitted under the National Ambient Air Quality Standards for carbon monoxide or ozone.
- **Environmental Justice:** The significance threshold for Environmental Justice would be disproportionate, high adverse human health or environmental effects on minority or low-income populations. This threshold would be reached if one or more important subsistence resource becomes unavailable, undesirable for use, or available only in greatly reduced numbers for a period of 1-2 years; or chronic disruption of sociocultural systems occurs for a period of 2-5 years, with a tendency toward the displacement of existing social patterns. Tainting of subsistence foods from oil spills and contamination of subsistence foods from pollutants would contribute to potential adverse human health effects.

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## IV.A.2. Exploration, Development and Production, Timing of Activities, Transportation Assumptions, and Abandonment

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### IV.A.2.a. Assumed Resources

All hydrocarbon resources estimated to be produced as a result of proposed Lease Sales 186, 195, and 202 should be crude oil. The production of gas is not considered feasible at this time, because there is no gas-transportation system from the North Slope to outside markets (see Section IV.H). Available oil-resource estimates for the entire program area range between 1.68 billion barrels and 2.87 billion barrels when correlated to market prices of \$18 and \$30 per barrel (in 2000\$). We assume that higher prices would be required to develop the more remote and/or difficult oil reservoirs. Resource estimates assumed to be discovered and developed for each of the proposed sales vary between 340 and 570 million barrels of oil, assuming market prices ranging between \$18 and \$30 per barrel (in 2000\$). For purposes of analysis, the MMS has assumed that each sale would have the potential to produce 460 million barrels of oil over the lifetime of its field production.

An expanded discussion of the resource estimates of the proposed action is found in Sections II.A and II.B and Appendix B. Tables IV.A-1 through IV.A-4 show the levels of infrastructure and resources estimated for the proposed action. These assumptions may overestimate effects, because the MMS has held seven sales on the Beaufort Sea OCS and, to date, the only production is the relatively small amount from the Federal portion of the Northstar facility, which started producing October 31, 2001.

### IV.A.2.b. Timing of Activities

The level of exploration- and development-related activities and the timing of events for the proposed action are shown on Tables IV.A-1 through IV.A-4 and in Appendix B. For purposes of analysis, we have created the following scenarios.

**Sale 186 would be held in 2003.** Exploratory drilling would begin in 2004 and continue until 2009, with delineation wells drilled through 2010. No more than two drilling rigs would operate at any time, with a total of six exploration and six delineation wells expected to be drilled over the 7-year exploration period. A maximum of two exploration platforms would be in service during any year, assuming one exploration rig per platform. If the first commercial discovery is made in 2005, 2 years after the sale date, production from Sale 186 would begin by 2010. Between 2009 and 2014, three production platforms are expected to be installed. Two platforms would be in the Near Zone, and one would be in the Far Zone. Drilling